



CommScope FLX™ XGS-PON Optical Module, Single fiber bi-directional data links with 9.953 Gbps downstream and 9.953 Gbps / 2.488 Gbps upstream, SFP+ package with SC/UPC receptacle interface

## FEATURES

- Support ITU-T G.9807.1 XGS-PON OLT N2 Application
- Single fiber bi-directional data links with 9.953 Gbps downstream and 9.953 Gbps / 2.488 Gbps (compatible) upstream
- 1577 nm continuous-mode transmitter with EML laser
- 1270 nm burst-mode receiver with APD-TIA
- 2-wire interface for integrated digital diagnostic monitoring
- SFP+ package with SC/UPC receptacle optical interface
- +3.3V power supplies
- RoHS With Exemptions
- 20Km Reach
- Operating case temperature Industrial temp: -40 ~ +90°C

## Product Classification

<b>Product Type</b>	Optical transceiver
<b>Product Brand</b>	CommScope FLX™
<b>Product Series</b>	SFP

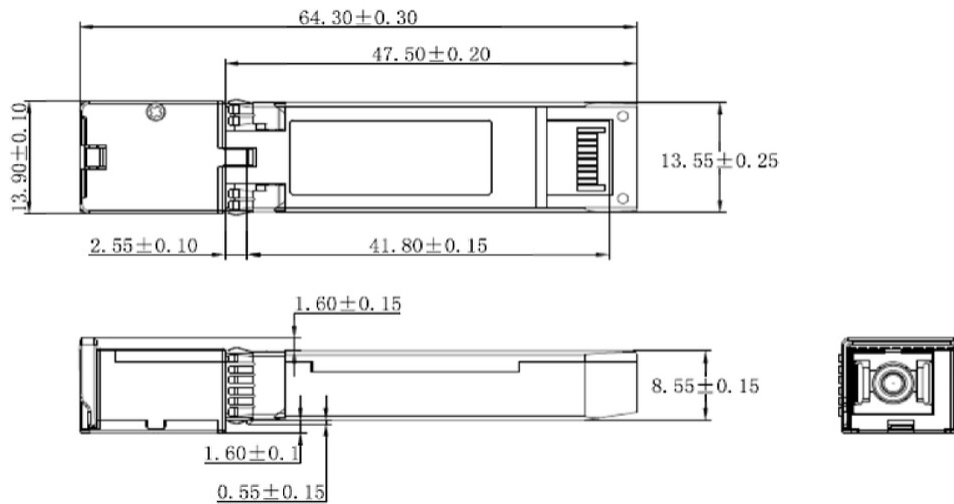
## General Specifications

<b>Transmission Distance, maximum</b>	20 km
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## Dimensions

<b>Height</b>	12.294 mm   0.484 in
<b>Width</b>	13.894 mm   0.547 in
<b>Length</b>	64.287 mm   2.531 in

## Dimension Drawing



## Port Configuration

Pin	Logic	Symbol	Description
1	LVTTL	Rate_Sel	2.5G = Low, 10G = High
2	LVTTL-O	TX_Fault	High voltage: TX Laser fault or safety, low voltage: Normal operation
3	LVTTL-I	Tx_Disable	Active high to disable laser
4		SDA	2-Wire serial interface SDA
5		SCL	2-Wire serial interface SCL
6		MOB_ABS	Module Ground
7		RESET	Reset for TIA/LIA, Active High
8	LVTTL	Rx_SD	Receiver signal detect, logic 1 indicates normal operation
9	LVTTL	RSSI_Trigger	RSSI trigger input, active high
10		GND	Module Ground
11		GND	Module Ground
12	LVCML	RD-	2.5/10G LVCML output with DC coupling
13	LVCML	RD+	2.5/10G LVCML output with DC coupling
14		GND	Module Ground
15		VCC	+3.3V Power supply
16		VCC	+3.3V Power supply
17		GND	Module Ground
18	LVCML	TD+	10G LVCML input with AC coupling
19	LVCML	TD-	10G LVCML input with AC coupling
20		GND	Module Ground

## Electrical Specifications

<b>Input Current, maximum</b>	796 mA
<b>Input Voltage</b>	+3.13 to +3.47 Vdc
<b>Input Voltage, maximum</b>	3.6 V
<b>Power Consumption, maximum</b>	2.5 W

<b>Receiver Data Output Differential Swing Range</b>	300–800 mVpp
<b>Receiver Loss of Signal Assert Time, maximum</b>	100 ns
<b>Receiver Loss of Signal de-Assert Time, maximum</b>	50 ns
<b>Receiver Loss of Signal Detected Voltage High, minimum</b>	2 V
<b>Receiver Loss of Signal Detected Voltage Low, maximum</b>	0.8 V
<b>Transmitter Data Input Differential Swing Range</b>	200–850 mVpp
<b>Transmitter Differential Impedance, typical</b>	100 ohm

## Optical Specifications

<b>Optical Isolation, minimum</b>	–32 dB (from external above 1280 nm)   –32 dB (from external below 1260 nm)
<b>Optical Port Interface</b>	SC/UPC
<b>Receiver Center Wavelength</b>	1270 nm nominal (1260–1280 nm)
<b>Receiver Loss of Signal Assert Level, minimum</b>	–30 dBm
<b>Receiver Saturation, minimum</b>	–7 dBm
<b>Receiver Loss of Signal de-Assert, maximum</b>	–42 dBm
<b>Receiver Sensitivity, maximum</b>	–28 dBm
<b>Transmitter Center Wavelength</b>	1577 nm nominal (1575–1580 nm)
<b>Transmitter Optical Path Penalty, maximum</b>	1 dBm
<b>Transmitter Extinction Ratio, minimum</b>	8.2 dB
<b>Transmitter Side Mode Suppression, minimum</b>	30 dB
<b>Transmitter Eye Diagram, maximum</b>	3.2 dB
<b>Transmitter Launch Power Range</b>	+4 to +7 dBm
<b>Transmitter Launch Power OFF Transmitter, maximum</b>	–39 dBm

## Environmental Specifications

<b>Operating Temperature</b>	–40 °C to +90 °C (–40 °F to +194 °F)
<b>Operating Humidity</b>	5%–85%